

THE SPECIES OF THE GENUS *SUILLIA* FOUND IN THE  
AMERICAS SOUTH OF THE UNITED STATES  
(DIPTERA: HELEOMYZIDAE)

GEORGE C. STEYSKAL

Systematic Entomology Laboratory, IIBIII, Agric. Res., Sci. and Educ. Admin., USDA, % U.S. National Museum of Natural History, Washington, D.C. 20560.

---

*Abstract.*—*Suillia hololoma* is described from Mexico (State of Oaxaca) and *S. vergarae* from Colombia, the latter the first record of its genus in South America. A new key to the eight species that occur south of the United States is given, including *S. barberi* (Darlington), newly recorded from Durango, Mexico, but previously known from the United States.

---

When I described *Suillia valleyi* (Steyskal, 1972), only four other species of the genus were known to occur south of the United States, all of them in Mexico only, as shown in the catalogue by Gill (1968). One of the species, *S. iniens* (Giglio-Tos), was collected in "Mexico" by Sumichrast, who did most of his work in the southern part of the country. I recorded that species also from the State of Oaxaca in 1972. The other three were described from the State of Guerrero by Wulp. *Suillia valleyi* was collected at Tenancingo, in the State of Mexico. Since then I have seen a specimen of *S. barberi* (Darlington), a species previously known from several of the western United States, from 23 miles west of Durango, State of Durango, Mexico; and the following 2 new species have come to hand. Many species of *Suillia* are found in the Palaearctic and Nearctic regions.

*Suillia hololoma* Steyskal, NEW SPECIES

A species with conspicuously many-spotted wings, evidently most closely related to *S. polystigma* (Wulp), as shown in the appended key.

Female. Length of wing 5.8 mm. Color generally tawny, shading to yellowish and brownish and with dark brown to blackish parts as follows: Forefemur; apical  $\frac{1}{4}$  of all tibiae; 3 or 4 apical tarsal segments; dorsal part of antenna; ocellar triangle; upper parafacial between antenna and eye; ill-defined, broad medial longitudinal stripe and more sharply defined lateral stripes on dorsum of abdomen. On thoracic pleura, a brown stripe extends

from upper propleuron to metathoracic spiracle, darkest ventrad of humerus and notopleuron. Hindtibia with poorly defined subbasal annulus. Wing coloration as below.

Head with cheek 0.44 as high as eye; longest arisal hairs nearly 3× as long as basal diameter of arista.

Thorax with dorsum rather evenly light brownish, somewhat paler laterally and with a pair of faint backwardly pointed median brownish wedges on scutellum. Mesopleuron with numerous setulae in posterior half. Dorsal surface of scutellum with numerous setulae.

Wing grayish with brown to blackish markings as follows: Almost anterior half of cell 2nd C, all except slender basal part of cell  $R_1$  (including 2 or 3 somewhat darker spots near its tip), series of 6 roundish spots in cell  $R_3$  and tip of that cell, broad seams on both crossveins, 3 round spots and tip of cell  $R_5$ , 1 large preapical and 2 or 3 small medial spots in distal cell, 1 central spot in cell AM (2nd  $M_2$ ), and series of 3 round spots in cell ACu ( $Cu_1$ ). Squamae whitish with long predominantly whitish fringe. Halter whitish.

Holotype.—♀, 20 mi S Oaxaca, Mexico, 13 August 1972 (R. Mangan and P. T. Sluss); type no. 77547 in U.S. National Museum of Natural History.

I am grateful to the collectors for the privilege of describing this species. The specific epithet is from Greek *holos* "complete" + *loma* "border," a noun in apposition referring to the characteristic wholly dark brown anterior border of the wing in cell  $R_1$ .

### *Suillia vergarae* Steyskal, NEW SPECIES

#### Fig. 1

This species, the first of its genus from south of Mexico, is a contrastingly colored, rather unique form showing no close relationships with other species, as shown in the appended key. The fact of its occurrence in the northern Andes suggests that additional species may eventually be found at higher altitudes in Central and South America and that it would be best to defer speculation as to its relationships.

Male.—Length of wing 6.2 mm. General color bright tawny with upper parts of antenna and head brownish and following parts blackish: All femora; apical  $\frac{1}{5}$  of all tibiae; apical 3 segments of all tarsi; broad stripe from humerus to base of wing, a little wider below than above lateral suture and including bases of notopleural setae; small streak along lower edge of mesopleuron dorsad of sternopleural seta; large central area of mesoscutum, with narrow division into 3 nearly equal longitudinal stripes and brown continuation onto base of scutellum as semilenticular mark. Narrow borders of abdominal terga 2 to 4 posterior to row of apicomarginal setae gray. Orbito-antennal spot faint, gray. Wing as in Fig. 1; squamae grayish, with long black fringe; halter whitish.

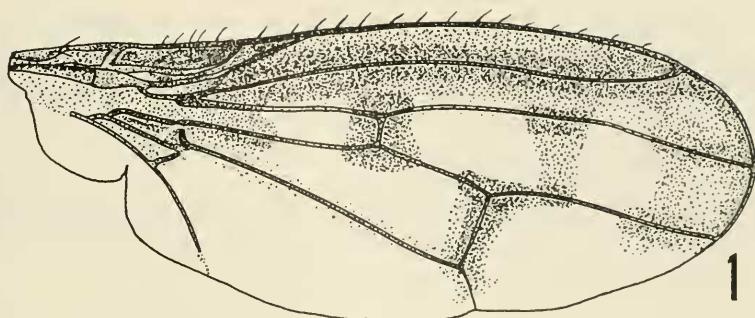


Fig. 1. *Suillia vergarae*, wing of holotype.

Head with cheek 0.22 as high as eye; arisal hairs a little shorter than basal diameter of arista.

Thorax with mesopleuron and dorsum of scutellum lacking setulae.

Female.—Similar to male except sexually; postabdomen and apicomedian triangle on 6th and basimedial triangle on 7th terga gray.

Types.—Holotype ♀, allotype ♂, and 1 ♀ paratype, Boyacá Department, Colombia, 15 May 1978 (Gustavo Manosalva), in forest plantation at 2600 meters above sea level; type no. 77548 in U.S. National Museum of Natural History, with right wing of holotype on microslide.

I am indebted to Rodrigo Vergara Ruiz, teacher in the Universidad Pedagógica y Tecnológica at Tunja, for these fine specimens; the specific epithet *vergarae* is a Latin genitive form of his paternal name, applied in recognition of his services in bringing to scientific attention several interesting species of flies.

#### KEY TO SPECIES OF *SUILLIA* FROM SOUTH OF THE UNITED STATES

- 1 (4). Cell  $R_3$  of wing with series of 5 or 6 disjunct dark spots; cell  $R_5$  with 3 to 5 dark spots; mesopleuron setulose.
- 2 (3). Cell  $R_1$  with series of 8 dark spots adjoining narrow dark costal border; cell  $R_5$  with 5 disjunct dark spots; arisal hairs very short ..... *S. polystigma* (Wulp)
- 3 (2). Cell  $R_1$ , except at slender base, wholly dark brown and including 2 or 3 even darker spots near tip; cell  $R_5$  with 3 or 4 dark spots; arisal hairs nearly 3 times as long as basal diameter of arista ..... *S. hololoma*, new species
- 4 (1). Cell  $R_3$  without adjunct spots, or with only 1; cell  $R_5$  with at most 2 disjunct dark spots; mesopleuron bare or setulose.
- 5 (8). Cell  $R_5$  with median dark spots not connected either with vein  $R_5$  or M; mesopleuron setulose.

- 6 (7). Spots of cell  $R_5$  small and round; last section of vein M with median dark spot opposite apical one of 2 spots in cell  $R_5$ ; arista nearly bare . . . . . *S. distigma* (Wulp)
- 7 (6). Spots of cell  $R_5$  elongate-elliptical; last section of vein M dark-seamed, continuous with brown seam of crossvein *tp* and dark apex of wing; arista long-plumose . . . . . *S. valleyi* Steyskal
- 8 (5). Cell  $R_5$  without isolated median spots, but hyaline, with complete transverse band or bands, or with only light brown median longitudinal streak; mesopleuron setulose or bare.
- 9(10). Cell  $R_3$  (Fig. 1) nearly wholly dark brown, concolorous with cell  $R_1$ ; cell  $R_3$  with median transverse dark brown bar and apical brown area usually somewhat paler centrally; mesopleuron bare; arista short pubescent . . . . . *S. vergarae*, new species
- 10 (9). Cell  $R_3$  somewhat paler than light brown cell  $R_1$ , with longitudinal light brown streak and preapical transverse band or indistinct apical infuscation; cell  $R_3$  with median transverse band; mesopleuron bare or setulose; arista more or less plumose.
- 11(12). Tip of wing with distinct preapical transverse brown band through cells  $R_3$  and  $R_5$ ; cell  $R_1$  paler preapically; cells  $R_3$  and  $R_5$  with light brown longitudinal streaks; crossvein *tp* with narrow brown seam extending distad and basad to form T-shaped mark; mesopleuron setulose; arista short-plumose . . . . .  
. . . . . *S. iniens* (Giglio-Tos)
- 12(11). Tip of wing without distinct preapical transverse band; cell  $R_1$  not preapically paler; otherwise various.
- 13(14). Mesopleuron bare; cell  $R_3$  mostly hyaline, without longitudinal streak and strongly contrasting with dark brown cell  $R_1$  and wing tip; cell  $R_5$  without longitudinal streak; arista plumose . . . . . *S. punctulata* (Wulp)
- 14(13). Mesopleuron with several setulae in posterior half; cell  $R_3$  somewhat paler than moderately brown cell  $R_1$  or with longitudinal streak; cell  $R_5$  with longitudinal streak; arista short-plumose . . . . . *S. barberi* (Darlington)

## LITERATURE CITED

- Gill, G. D. 1968. Family Heleomyzidae. In Vanzolini, E. P. and Papavero, N., A catalogue of the Diptera of the Americas south of the United States. Dept. Zool., Sec. Agric., São Paulo, fasc. 85: 1-13.
- Steyskal, G. S. 1972. Notes on the genus *Suillia* in Mexico, with the description of a new species (Diptera: Heleomyzidae). Proc. Entomol. Soc. Wash. 74: 303-305.